

The proper inquiry, when determining whether a claim satisfies the requirements of 35 U.S.C. § 112, second paragraph, is a determination "whether those skilled in the art would understand what is claimed when the claim is read in light of the specification."

Orthokinetics Inc. v. Safety Travel Charis, Inc., 1 U.S.P.Q.2d 1081, 1088 (Fed. Cir. 1986). Thus, if those skilled in the art can understand what is claimed when the claim is read in light of the specification, a rejection under 35 U.S.C. § 112, second paragraph, is inappropriate. Those of ordinary skill in the art would readily understand claim 33 as written.

As recited in the claim 33, L is

independently, piperazine, pyridazine, pyrazine, triazine, phthalimido, an ether having 2 to 10 carbon atoms and 1 to 4 oxygen or sulfur atoms, hydrogen, halogen, hydroxyl, thiol, keto, carboxyl, NR^1R^2 , CONR^1 , amidine, guanidine, glutamyl, nitro, nitrate, nitrile, trifluoromethyl, trifluoromethoxy, NH-alkyl, N-dialkyl, O-aralkyl, S-aralkyl, NH-aralkyl, azido, hydrazino, hydroxylamino, sulfoxide, sulfone, sulfide, disulfide, silyl, a nucleosidic base, an amino acid side chain, or a carbohydrate[.]

Those of ordinary skill in the art know and understand the nomenclature used in claim 33 to describe "L" and they also know what structure corresponds to each group. A person of ordinary skill in the art is capable of looking at a chemical structure and can identify the types of groups that it contains and whether or not that group is part of what is recited in the claim. Therefore, a person of ordinary skill in the art would readily understand what the Applicants regards as the invention and be able to determine the compounds that fall within the scope of claim 33.

Thus, claim 33 is clear and definite because persons of ordinary skill in the art would readily understand the claim. In view of the foregoing, Applicants respectfully request that the rejection under 35 U.S.C. § 112, second paragraph be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 2-5, 7-12, and 33 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gordeev *et al.* (WO 96/33972), Grandoni (U.S. 5,998,420) and Hamprecht *et al.* (U.S. 5,591,694) in view of Gordon *et al.* (J. Med. Chem. **37**, pp. 1385-

1401, 1994). Applicant traverses the rejection because, *inter alia*, the combination of references does not produce the claimed invention.

The Office action asserts, incorrectly, that the Gordeev reference "reads on" the compounds of the claimed mixtures. The Office alleges that the library compounds of the Gordeev reference have the claimed heterocyclic scaffold and substitution pattern. The structure of formula I comprises tether moieties at 3 positions and then an "L" group attached to each tether moiety. However, the compounds discussed in the Gordeev reference do not have this structure, nor is there a suggestion or motivation within this reference to modify the structures disclosed so that they would have a similar structure to what is recited in claim 33. As admitted by the Office action "Gordeev *et al.* lacks the specific teaching of the instantly claimed compounds of the library (specific T and L combinations)." (Office Action, page 5 top)

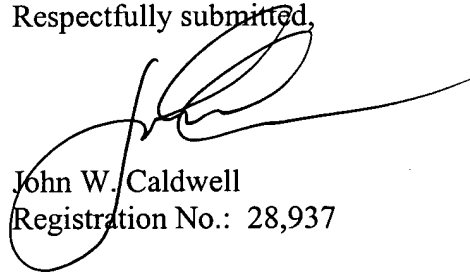
The Office urges that what the Gordeev reference lacks is supplied by the Hamprecht reference or Grandoni reference in further view of the Gordon reference. However, this is mistaken. The sulfonylurea herbicides of Grandoni and Hamprecht do not read on compounds of the claimed mixtures. No selection of tether "T" and chemical substituent "L" of the claimed compounds will give the thiourea compounds reported in the Grandoni and Hamprecht references. Further, the Gordon reference merely reports general aspects of combinatorial organic synthesis and does not, in any way, remedy the deficiencies of the Grandoni and Hamprecht references. The Office Action mistakenly asserts that compound "8 KIH-2031/DPX-PE 350" at page 6 of the Grandoni reference is within the scope of claim 33. "8 KIH-2031/DPX-PE 350," however, contains a $\text{-CO}_2\text{Na}$ substituent appended to the substituted carbocyclic moiety, which is not one of the substituents recited in claim 33. Furthermore compounds S, T, U, and V in figure 5 do not read on the structures recited in claim 33. The Office alleges that the Hamprecht reference discusses sulfonylurea herbicides and that it also discusses that varying the substituents on the pyrimidine moiety is a preferred method. However, none of the compounds disclosed in the Hamprecht reference reads on the compounds of claim 33. Furthermore, the Office Action's attempt to show that the Hamprecht reference supplies motivation for "varying the substituents on the pyrimidine moiety" so that the structures in the Gordeev reference can be modified to read on claim 33 is not sufficient. One of

ordinary skill in the art has hundreds, if not thousands of ways to modify the substituent pattern on a pyrimidine backbone. The above references, even in view of the Gordon reference, fail to teach the limitations of claim 33. None of the references disclose compounds that would fall within the scope of claim 33, nor is there a suggestion or motivation to modify the structures disclosed so that they would read on claim 33. Therefore, even if one of ordinary skill in the art combined the above references one would still not have the present invention.

Thus, the combination of the cited references fails to produce any of the compounds recited in claim 33. Therefore, the combination of references fails to result in a *prima facie* case of obviousness. Accordingly, Applicant requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

The foregoing represents a *bona fide* attempt to advance the present application to allowance. Applicants respectfully invite the Office to contact the undersigned at (215) 564-8906 to discuss any issues unresolved by this response. A Notice of Allowance is earnestly solicited.

Respectfully submitted,



John W. Caldwell
Registration No.: 28,937

Date: September 27, 2002

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
(215) 568-3100